

ABSTRACT
THE ROLE OF COMBINE FOOD (RICE BRAN AND FAT) OF TOTAL
CHOLESTEROL LEVELS, TRIGLYCERIDES AND LDL
OF WISTAR STRAIN RATS

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Rice bran is a food source that has the potential to lower cholesterol because the high content of dietary fiber and bioactive components such as oryzanol, phytosterols, and tocopherols and tocotrienols. The purpose of this research was to analyze the provision of rice bran and high cholesterol diet on total cholesterol, triglycerides and LDL in wistar strain rats. This was an experimental research with a randomized post-test only control group design. 25 wistar strain rats were divided randomly into 5 groups and were treated for 4 weeks. Group (K-) was given a standard diet, (K +) was given a standard diet and high cholesterol, (P1) was given a standard diet, high cholesterol and 10% rice bran, (P2) was given a standard diet, high cholesterol and 30% rice bran, (P3) was given a standard diet, high cholesterol and 50% bran. Total cholesterol level was measured using the CHOD-PAP method, triglyceride using the GPO-PAP method and LDL using a homogeneous assay method. Data were analyzed using One Way ANOVA and Tukey HSD. Rice bran and high-cholesterol diet simultaneously provision lowered total cholesterol levels significantly ($p = 0.000$), triglycerides ($p = 0.001$) and LDL ($p = 0.048$). Results of Tukey HSD of total cholesterol was significant between groups K and K + ($p = 0.001$), K + and P1 ($p = 0.000$), K + and P2 ($p = 0.000$), K + and P3 ($p = 0.000$) as well as P1 and P3 ($p = 0.029$), triglycerides was significant between the K + and P1 (0.001), K + and P2 ($p = 0.008$) as well as K + and P3 ($p = 0.001$), LDL was only significant between the K + and P3 ($p = 0.024$). Rice bran and high cholesterol diet simultaneously can reduce total cholesterol, triglycerides and LDL in wistar strain rats.

Keywords: Combine Food, Total Cholesterol, Triglycerides, LDL